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ABSTRACT

The question addressed in this thesis was, "Does the decision source for change make a difference to a teacher's or implementor's organizational commitment and job satisfaction?" It was hypothesized that the decision sources for implementing Individually Guided Education (IGE) in schools does not affect the teacher's commitment to the school and job satisfaction. The study included teachers from six urban elementary schools. Three schools were identified as having internally initiated IGE and three in which IGE was implemented as the result of a decision made by policy makers outside of the school. The data collection and analysis consisted of each participant completing a questionnaire packet which included background data and two research instruments, the Organizational Commitment Questionnaire (OCQ), and the Job Descriptive Index (JDI). Participants were also asked interview questions, which included how they entered their job and the reasons they might leave their present teaching assignment. An analysis of the dependent variables on the basis of participant scores on the OCQ and JDI research instruments indicated that overall organizational commitment and job satisfaction was fairly high in all six schools. It was tentatively concluded that the decision source for implementing IGE did not make a difference to a teacher's organizational commitment and job satisfaction. (JD)

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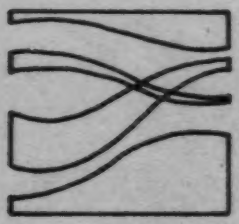

Technical Report No. 548

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by

Thomas Gregory Coley

Report from the Project on
Studies of Implementation of Individualized Schooling

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DEDICATION

I wish to dedicate this study to my mother, Ms. Mary Lee Coley, and my late grandmothers, Ms. Estelle Hicks and Ms. Kelsie Charles--for you, your son pushes on. With love.

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I wish to thank my committee for guiding me through the maze of completing a doctoral dissertation. Professor Donald McCarty, as my faculty advisor and committee chairman, offered timely advice and direction while allowing me to pursue my areas of interest in the dissertation. Professor Marvin Fruth was helpful not only as a committee member but as faculty associate to the Studies of Implementation project, through which I was able to find support in order to conduct my research. And, Professor I. Phillip Young I owe a special thanks for his adept assistance in the methodological design of my study. Also, I wish to thank Professor Dennis Dresang who served as my minor advisor from Political Science, for serving on the defense committee and for his efforts in recruiting me to such a prestigious educational institution as the University of Wisconsin. A special thanks to Professor Joseph Kauffman for serving on the defense committee and for his cooperation throughout my studies in the educational administration department.

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ABSTRACT

THE IMPLEMENTATION OF PLANNED EDUCATIONAL CHANGE: A MULTIVARIATE ANALYSIS OF THE DECISION SOURCE FOR CHANGE, ORGANIZATIONAL COMMITMENT, AND JOB SATISFACTION AMONG ELEMENTARY SCHOOL TEACHERS

Thomas Gregory Coley

Under the Supervision of Professor Donald J. McCarty

As part of the Studies of Implementation project of the Wisconsin Research and Development Center for Individualized Schooling, the general focus of this research was to identify and interrelate significant factors which affect the change process in selected schools and to explore the relationship of these factors to subsequent adaptations in innovative practice. The specific objective was to examine the relationship between external decisions for planned educational change (deliberate, major policy/program initiatives) and how the planned change is implemented in a school organization as indicated by a teacher's organizational commitment and job satisfaction.

The research question under investigation was, "Does the decision source for change make a difference to a teacher's or implementor's organizational commitment and job satisfaction?" The null hypothesis, therefore, was: Whether the decision for change is internally or externally initiated (the decision source)

makes no difference in a teacher's organizational commitment and job satisfaction.

Individually Guided Education (IGE) was used as the planned change. The sample design included 80 teachers from 6 schools currently using IGE in an urban midwestern city. Based on secondary and interview data each school was identified as either an internally initiated decision school or an externally initiated decision school; three schools were identified for each school grouping. Teachers were randomly selected from each school with 40 teachers participating from each decision source grouping.

The data collection and analysis consisted of teacher responses to the Organizational Commitment Questionnaire (OCQ) developed by Porter et al. (1974) the Job Descriptive Index (JDI) developed by Smith et al. (1969), and four interview questions. The Hotelling's T^2 was used to provide a multivariate analysis of the null hypothesis. The alpha level for significance was set at .05. As a result of the data analysis, the null hypothesis was accepted. This finding, however, cannot be considered conclusive.

In the discussion and implication of the study's finding, several areas for further research were identified:

1. Years of experience with IGE among teachers may warrant further attention.

2. The nature of decisional participation could account for discrepancies between actual and perceived decision source for implementation. Attention might be given to the relationship between

meaningful vs. perfunctional decisional participation during actual implementation of planned change.

3. The motives for remaining with or entering into an organization implementing planned change may be important to understanding and explaining the implementor's commitment and satisfaction with the planned change.

4. A distinction might be made between the decision source and the impact of the accompanying costs and benefits associated with the change. This distinction suggests that measures are needed to address areas such as rule compliance, changes in organizational resources, and changes in autonomous privileges.

Based on these observations it was suggested the researchers and practitioners should give closer attention to the motives and interests of implementors and to the nature of policy decision sources impacting efforts to implement planned educational change.

Approved: Alan Gaulay

Date: June 15, 1980

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CHAPTER I

INTRODUCTION

The purpose of this study is to examine the relationship between decisions initiated by external agencies and the implementation of educational planned change. As part of the Studies of Implementation project of the Wisconsin Research and Development Center for Individualized Schooling, the general focus of this research is to identify and interrelate significant factors which affect the change process in selected schools and to explore the relationship of these factors to subsequent adaptations in innovative practice. In this chapter, key terms are defined and a review of the literature is undertaken to provide a basis for research questions and hypotheses.

Definition of Key Terms

A cursory examination of the literature on planned educational change reveals that there is a wide variation in the definitions of terms. To avoid possible confusion, the definitions of key terms used in this study are listed below.

> Organization: The organization is defined as a system of interrelated behaviors and expectations of people who are performing a task in order to achieve effective performance within the system (Lawrence & Lorsch, 1967, p. 3;

Stogdill, 1966, p. 22).

Integration: Integration is defined as a process of achieving unity of effort among members in the organization (Lawrence & Lorsch, p. 3). Furthermore, integration is an indication of the organization's ability and effort to maintain structure and functional relations as policies are implemented (Stogdill, p. 85).

Commitment: Commitment is defined as an identification with what the change will bring to the organization and the extent to which a member of the organization is willing and able to perform tasks comprising the change (Burns, 1963; Katz, 1968; Porter, 1974).

Satisfaction: Satisfaction is defined as organization members' acceptance of situational and organizational factors which affect how they are able to interrelate with others within the organization and carry out task objectives. Inducement-contributions schemata such as pay and other incentives, the actual work to be performed, and co-workers are examples of job satisfaction facets (March & Simon, 1960, pp. 84-88; Simon, Smithburg, & Thompson, 1950, pp. 381-382).

Planned Change: Planned change is defined as a deliberate and major alteration in the goals, structure, or processes within an organization (Miles, 1964, p. 13).

Change Process: The change process includes adoption (activities which proceed the actual use of implementation), implementation (activities involved with actual use of the change), and adaptation (activities that either modify the change to meet environmental condition or modify the organization to meet the requirements of the planned change)(Barrows, Klenke, & Heffernan, 1979).

Implementation Process: Bardach (1979) described the implementation process as: (a) a process of assembling the required elements for producing a particular programmatic outcome, and (b) the playing out of a number of loosely interrelated games whereby these elements are withheld from or delivered to the organization on particular terms (pp. 57-58). Conversely, the process includes the manuevers and counter manuevers by organization members to adjust the planned change to their particular interests, either personally, organizationally, or professionally (Burns & Stalker, 1971).

External Agencies and Decisions: External agencies consist of those agencies whose decisions are relevant to goal setting and goal attainment within an organization (Dill, 1968; Evan, 1967).

Review of the Literature

Orientation to the Problem

In general, empirical research literature pertaining to the relationship between external agencies' decisions and the implementation of planned change is limited. Among the research that exists, at least two major findings are prevalent: (a) when planned change is initiated by external agencies, those who must implement the change at the organization level (e.g., teachers) are likely to be less committed and satisfied with the change than if the change was initiated within the organization, and (b) when the change is initiated externally, those who initiated the change must utilize strategies which will induce the implementors to become committed to the change and thereby comply with the objectives of the new policy or program. The purpose of this section is to examine the significance of these two findings to implementing change in school organizations.

When change is initiated externally, the levels through which decisions and compromises must take place obviate the intent of the change and further complicate the implementation process. Pressman and Wildavsky (1973) in their study on implementation noted that the greater the number of administrative levels through which a change effort must pass, the greater the possibility that the original intent and objectives will be changed, if not subverted outright. Furthermore, the difference between where the decision is

made and the prevailing preferences, values, and commitments of the actors involved may explain how the change is implemented or will be implemented. Abbott (1969) noted that resistance and/or discontinuance of a change represents "sunk costs" to those at the organizational level responsible for carrying out the change objectives. In the educational enterprise, sunk costs consist of a "substantial investment in training or experience and a psychological commitment to particular ways of programming activities. Conversely, the forces for change represent some sort of dissatisfaction with the status quo" (Abbott, p. 43). As a result, Abbott argued that if a new policy or program is to be successful, it almost necessarily must originate at the organizational or school level.

In a related report, Warren (1976) observed that despite the available resources, the New York City's schools Experimental Elementary Programs (EEP) were subverted by teachers partly because the decision to implement the programs was viewed by teachers as a mandate from outside agencies. As a result, teachers were not cooperative with the agencies managing EEP; nor were they committed to implementing the new program. In essence, the teachers felt their autonomy to teach and perform activities in the school was encroached upon. In light of these observations, it appears that commitment and satisfaction among participants at the level of implementation may be contingent upon the locus of decision to implement.

Another finding views externally initiated change in terms of how outside agencies get those who will implement the change to carry out the intent and objectives. Gross and his associates (Gross, Giacquinta, & Bernstein, 1971; Herriott & Gross, 1979) contend that the success or failure of educational change is basically a function of the manager's ability to overcome staff resistance to change. The models developed by Gross (the "Overcoming Resistance to Change" (ORC) model--and the "Leadership Obstacle Course" (LOC) model) assume that external decisions to implement have taken place and that resistance in varying types and degree will take place. The burden of proof is upon those in charge of managing the change to eliminate these obstacles. The obstacles are to be removed by utilizing strategies which will induce commitment to and satisfaction with the change (Herriott & Gross, pp. 30-38). For example, Herriott and Gross emphasized power-equalization strategies which include participation of subordinates in how the change will be implemented. The result is to develop a sense of involvement and attachment to the change.

In essence, the manager of change ensures that the implementors of change will comply with the intent and objectives of the planned change. McLaughlin (1976) also viewed compliance as a major obstacle to overcome when change is externally initiated. In her research on the ESEA Title I program, McLaughlin noted the failure of implementing Title I was in part due to a lack of induced

compliance from those who were to implement the new policies. According to McLaughlin, the factors which support compliance--common goals, an incentive system, information feedback, reliable knowledge about effective strategies, and effective authority--were in the instance of Title I deficient or unstable in some respect (p. 414). In short, when change is mandated or issued downward and outside of the school or organization, there must be some means to induce compliance. Implicit in this approach is the assumption that over time individuals will become committed to the planned change once they are oriented to the intent and objectives of the change.

To summarize, at least two findings related to external agency decisions and the implementation of educational change have been identified: (a) the implementors of change are likely to view externally initiated change with apprehension and resistance, and (b) when external agencies initiate change, the focus is on management control and compliance in order to get implementors to meet the intent and objectives of the change. A major assumption is that commitment and acceptance can be developed through various strategies and incentives. Despite the assumptions and significance of the two findings related to external decisions and implementation, there is a lack of empirical investigation that links them in a process once the planned change is in use. Empirical research in this area may provide insight into many of the existing formulations or conceptualizations on implementing planned change in school

organizations.

Conceptual Approaches to Organizational Change and Implementation

Most theoretical models attempting to define organizational change have either de-emphasized the implementation process or defined implementation in limited terms. Barrows (1980) has observed that the change models do not account for top-down decisions for adoption and for external stimulus or impetus to change (Barrows, 1980, pp. 28-29). Researchers examining externally initiated change have recognized Barrow's criticism (e.g., Stills & Robinson, 1973; Levin, 1974; Coleman, 1973; Zaltman, Duncan, & Holbek, 1973). A shortcoming among researchers addressing externally initiated change is the basic assumption of a rational and phasic view of implementation. Based on this assumption, implementation of planned change has been studied and evaluated through identified stages. Individual or organizational conformity to the goals and use of technology included with the change is the most common research strategy.

Levin (1974), for example, in his polity model recognized that the implementation of change within an organization is conditional to external circumstances. According to Levin, the polity (external agencies) directly influence (a) the goals set by educational institutions or systems and the financial resources avail-

able to achieve those goals; (b) the selection of non-financial educational resources such as personnel; (c) the process whereby resources are mobilized and coordinated to achieve goals; and (d) the political, social, and economic results of educational process (pp. 12-16). Levin's perspective perhaps represents an extreme since he concluded no change can be successful if it moves ahead of the polity; therefore, educational change reflects changes in the organized society or polity. Levin's model does not consider the reactions and interactions between the polity and those who implement the change.

Zaltman, Florio, and Sikorski's (1977) Proactive/Interactive Change Model (P/ICM) attempted to provide a purposive interaction of the educational organization and its environment when the change is internally initiated (see Figure 1.1). According to Zaltman et al., the implementation of planned change comes about through improved communication linking the school's socio-political system to the environment, utilizing available resources and lowering the participant's resistance to change (Zaltman et al., 1977, Chapter X). The model is characterized by the type of relationship conditioned by the impetus for interaction between the school organization and an agency in the environment.

The impetus for interaction between the organization and its external agency is central to the P/ICM. Three types of relationships have been identified by Zaltman and his associates.

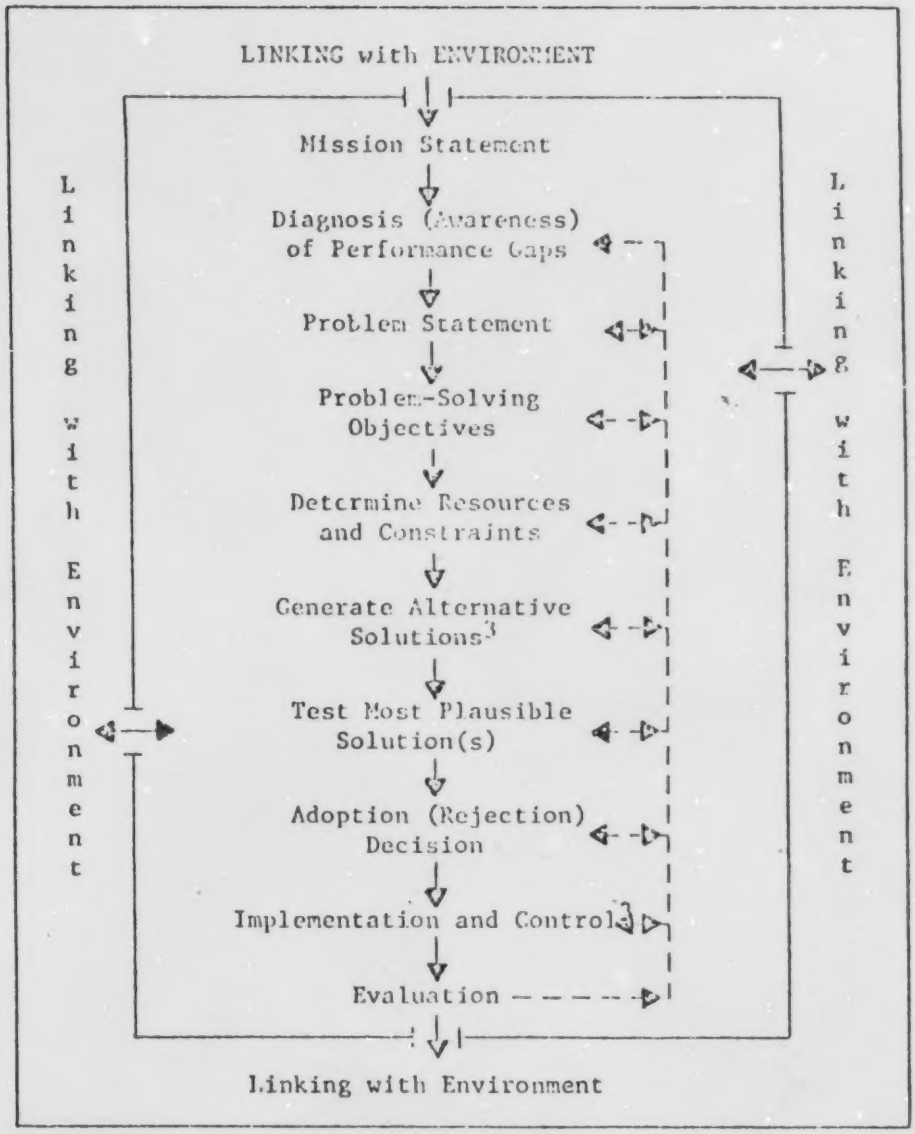

Figure 1.1. The proactive/interactive change model.

Source. G. Zaltman, D. H. Florio, and L. A. Sikorski. Educational change. New York: Free Press, 1977, p. 141.

1. Reactive relationships: In which the school or its system continually responds to external forces. Schools as open systems are often characterized as having reactive relationships with environmental entities.

2. Proactive relationships: In which the school takes the initiative to adopt and implement an innovation, while actively seeking needed external resources, energy, and knowledge.

3. Interactive relationships: In which change comes through dynamic interchange on a collaborative and synergistic basis between the school organization and the environment (Zaltman et al., 1977, p. 126).

In short, P/ICM can be summarized as an open system linking the school with external agencies and resources, where there is informed and collaborative decision making, unconstrained human interaction and the multidirectional communication flow (Zaltman et al., p. 181). In this strategy, change is initiated through the collaborative efforts of the organization members and between individuals in the organization and its environment (Gaddis, 1978, p. 67).

A weakness in the Zaltman et al. model is that like many of the models emphasizing adoption it presents ideal and prescriptive conclusions and strategies (Barrows, 1980). That is, it does not account for top-down, outside decisions and circumstances which mandate change for implementation in the organization. Zaltman recog-

nized that organizations react to external forces when he and his associates identify reactive relationships. But as the title of their model indicates, emphasis is on proactive and interactive change, i.e., internally initiated and collaborative change. What is not clear from their model is whether the same process and circumstances for internally initiated and collaborative change hold for externally initiated change.

Whether the same process and circumstances for internally initiated and collaborative change holds for externally initiated change is important for understanding the nature of the relationship between the organization and external agencies. Levin suggested that it is the polity's control over resources and the organization's dependency on the sources that will dictate implementation. Alternatively, an organization's independence of resources from the polity will dictate the implementation of change as well (Aldrich, 1979; Katz, 1968; Duncan, 1972). According to Emerson (1962), the dependence of an actor A (an individual, group, or organization) on another's actor B is directly proportional to A's motivational investments in goals mediated by B and inversely proportional to the availability of those goals to A outside of the A/B relation (Emerson, p. 32). The power to control or influence others thus resides in control over the things valued by the individual, group, or organization (for expansion of Emerson's theory, see Blau, 1974). Further attention, therefore, might be given to the extent to which individuals have control over the

resources and task objectives included with externally initiated change.

Based on Emerson's theory, one might conclude that emphasis on compliance assumes a dependency on resources by the agency carrying out the policy. This assumption includes how the resources are to be used or how the implementors are to perform the tasks engendered by the change within the organization. A possible source of conflict is the extent to which a dependent relation limits the autonomy of an organization and its members. Katz (1968) defined autonomy as independence from external control, meaning that activities of workers with the organization are not fully controlled either by organization structure or external agencies (Katz, p. 47). Katz stated that "an actor's strong commitment to an organization and its goals tends to be accompanied by autonomy privileges" (p. 31). Katz's definition of commitment is based on Barnard's definition, i.e., the willingness of the individual to serve (Barnard, 1938, p. 83). Implicit in Katz's approach is that commitment as a willingness to serve is based on a freedom to conduct tasks and manage resources in accordance with individual or organization goals. In terms of commitment to change, Katz seems to suggest that change initiated from within the organization is the most acceptable to members within the organization (p. 82).

Any assurance that everyone will accept the change will be determined by the degree of integration of members and tasks within

the organization (Thompson, 1967). In any case, even change initiated from the bottom up or within the organization is subject to external control and regulations if the magnitude of the change requires resources from the task environment. Katz assumed or implied a static organization in terms of whom will comprise the organization once the change is initiated. Educational change usually requires new personnel offering a particular expertise necessary for implementing the change. In addition to recruitment, there is turnover among staff requiring replacement. Since most schools will not be able to directly select who will enter the organization (due to union restrictions, government regulations, desegregation of staff, and other factors), a direct look at the integration process will be misleading. How the person enters the organization, for example, might affect their commitment to the change, to the organization, to the task environment, and to co-workers (Staw, 1977). Stogdill (1966) argued that the integration process is an outcome of the organizational process and is highly correlated with job satisfaction (p. 27).

Satisfaction is related to commitment in that individuals act not only in accordance with a sense of allegiance to the organization or the planned change but also because they view the change as alternative modes of self-advancement or self-preservation to that which is contained in membership in the cooperative system of the working organization (Burns & Stalker, 1971; p. xv). Job satisfaction is a key variable in that it helps to expand the focus

of implementation from considering not only the planned change but the impact of planned change on individual commitment and organizational operational maintenance. Burns' (1963) classification schema is illustrative of an interactive relationship or the origin of change and an organizational member's reaction to the change (see Table 1.1). Based on what Burns calls micropolitics or political actions that take place within the organization, his classification schema draws attention to likely political conditions that exist within the organization during implementation, not to where the impetus for change originates. Both commitment to and satisfaction with the planned change may not be solely a function of the decision making or adoption phase of the change process (Bardach, 1979). Rather, the degree of commitment and satisfaction is subject to the type of opportunities presented once the change is placed in the organization for use. The introduction and implementation of change to the organization either bring new resources (both material and human) and/or cause existing resources to be reallocated in order to carry out the change. In either case, planned change entails costs as well as benefits for members within the organization. According to Burns, the new situation is to be viewed as a "releasing mechanism" by which organizational members strengthen or weaken their position in terms of status and accomplishment as well as organizational goals (Burns, 1963).

Planned change, therefore, provides either the infusion of new resources into the organization or extinction or

Table 1.1

Burns' Classification Scheme of Micropolitics as Mechanism for Organizational Change

	External Change	Internal Change
Shared Beliefs	Involves those changes where the political action between the organization and the external agency introducing new resources share the same system of beliefs and the general effect is the maintenance of a dynamic equilibrium. Essentially there is no change in relations and no reversal of the balance of power.	Involves change initiated within the organization with a general consensus and commitment to the need for change or the acceptance of the need for change by those in the organization.
	Ⓐ	Ⓑ
	Ⓒ	Ⓓ
Discrepant Beliefs	Involves change that is externally induced and discrepancies in the kinds of values, purposes, and criteria of achievement obtaining among the members. There is a loss of control and power either between the organization and the external agency mandating the changes. Therefore, there is likely to be resistance to implementing the change through subversion and other tactics.	Involves political actions in circumstances of internally initiated organizational change when there are disparate views about the criteria and goals of the organization. The effect of the political action, is to alter the power relations while leaving the organizational structure relatively unaffected.

pp. 270-275.

reallocation of existing resources. Burns' model suggested that the implementation of change be viewed as manuevers and counter manuevers among organizational members pursuing their personal, individual interests. The integration of these interests is contingent upon the cost/benefit opportunities provided with the planned change. Where the change originates may suggest the extent to which individual members can actualize their self-interest. The self-interest perspective presented by Burns implied that individuals do not resist change; rather they resist efforts that will control their self-actualizing within the organization.

Summation of Conceptual Review

Review of conceptual models has revealed several discernable factors:

1. Where the decision for change originates may have some impact on how members within the organization will perceive change and ultimately how change will be used or implemented. The impetus of change may be contingent upon the nature of relationship in terms of control over resources (including the individuals implementing the change) and the ability of organizational members to accomplish the tasks entailed with the change. This point suggests it may be fruitful to conduct research which would consider not only externally initiated change but internally initiated change as well. Combining the nature of relationships with the impetus for change leads one to consider the decision source for change

As seen in Table 1.2, the decision for change is an indication of the nature and impetus for relationships, both within and outside of the organization, at the time of the change.

2. The implementation process is one of manuevers and counter manuevers among members within the organization attempting to actualize what they consider appropriate personal and organizational goals. Organizational commitment and job satisfaction are correlates of the implementation process. The manuevers of individuals in pursuit of their own interests are seen as responses to economic, social, political, and psychological forces. These are generated by the new expectations put upon the individual by the decision for change. The survival of the organization is contingent upon efforts to integrate demands for change and individual/organization autonomy to pursue their interests in accomplishing the goals or tasks required by the change.

While these factors are not exhaustive of the dynamics that take place when planned change decisions are initiated and implemented, they, nevertheless, offer considerable potential for expanding understanding the interrelated nature of external decisional relationships and the organizational change process, especially implementation.

Summary of the Review Literature

After a review of literature, several factors were identified which impacted the relationship between external agency

Table 1.2

Schema of Impetus of Change and Organizational Relations

Nature of Relation	Reactive	Proactive	Interactive
Dependent	External agency exerts complete control over how the change will be implemented; change is initiated externally--internal resistance.	Internally initiated change; organization is dependent on external agency for all the necessary resources to carry out the change.	Mutual recognition or decision to implement; the organization implementing the change is completely dependdent upon the external agency for resource.
Independent	Change initiated externally; organization members have choices about whether to carry out the change and how the change will be used in the organization.	Internally initiated; the organization uses its slack resources or is able to implement the change without outside support.	Mutually made decision; however, the organization implementing the change maintains complete control over procedure and resource.
Interdependent	Change is external; the procedures for how the change will be implemented is collaboratively set by the initiating agency and organizational members.	Internally initiated change; however, the organization collaborates with an outside agency to ensure implementation.	Mutually made decisions; organization and external agency collaborate on procedures and objectives and provide mutual levels of resources.

decisions for planned change and the implementation of planned change. Among the factors identified was that the many levels of hierarchy that external decision must pass will impact the original objectives and intent of change. The altering of objectives and intent occurs because at each level individuals shape the change in accordance to their particular value preferences.

Another factor was that resistance to change reflected sunk costs or for gone investments to individuals within the organization. As a result, change represents an altering of status quo of interpersonal relations and structure. In essence, teachers for example, are likely to feel that their autonomy to teach and perform activities has been encroached upon when the decision for change is external.

Because of the likely resistance to externally initiated change, researchers have suggested the use of power equalization strategies which would essentially coopt the implementors of the change. Power equalization strategies include teacher participation in the decision as well as staff development techniques, involving T-groups and sensitivity inservice training. The underlying factor is to get members in the organization to comply to the external mandate and use the change technology or implement a policy. In short, two general findings were related to external initiated decisions (a) the implementors of change are likely to view externally initiated change with apprehension and resistance because of their value preferences and sunk costs in the existing

practices and structure of the organization, and (b) when external agencies initiate change, the focus is on management control which manipulate the implementors of change into complying with the intent and objectives of the change.

A review of conceptual approaches to organization change and implementation indicated that the factors surrounding implementation were developed in a limited rational or phasic context. The context was limited in that researchers either considered internal decisions for change (made within the organization carrying out the objectives of planned change) or external decisions for change (made by agencies outside of the organization carrying out the objectives of the planned change). The research context was rational or phasic in that the implementation process was viewed in terms of sequential stages and that individuals acted or coopted to act in accordance to the prerequisites of the planned change.

Where decisions are made appear to be central understanding the actions of individuals and organizations involved in the implementation of planned change. Also, the management and organizational techniques developed up to this time are predicated on an underlying assumption of the origin a decision for change. After a review of the literature, the decision source change, organizational commitment, and job satisfaction were identified for further examination.

The decision source for change includes both internal and external decisions for change. Research that examines whether a difference exists between decision sources will provide an explicit, empirical basis for the research strategies and management techniques designed to study, evaluate, and ensure that the planned change objectives are accomplished.

Organizational commitment and job satisfaction are used as correlates of the implementation process. Rather than imposing a rational phasic schema, the reviewed conceptual literature suggested that individual self-interests should be the focus for understanding status of the implementation process. Individual self-interest involves the value acceptance and willingness of individuals who must perform the tasks entailed with change. The implementation process involves efforts to integrate demands for change with individual/organization autonomy to pursue their interests in accomplishing the goals or tasks required by the change.

Statement of the Problem and Hypotheses

Identification of the decision source for change expands the original focus from external agencies' decisions for change to consider the origin of the change. The origin of change consists of both the external decisions and internal decisions. The decision source for change, therefore, allows one to consider the impact of external agencies by first examining whether the origin, either

internal or external, makes more of a difference in the implementation of change. This strategy allows for a more informed assessment of probable reactions to change by those who are implementing the change.

The research question , therefore, is "Does the decision source for change make a difference in the organization's implementation process?" Individual commitment and job satisfaction were identified as correlates of the implementation process. Accepting these variables as indicators of the implementation process, the research question operationally stated reads as follows: "Does the source of a decision for change make a difference to a teacher's organizational commitment and job satisfaction?" Ancillary to this question is whether teachers are likely to be less committed when the decision source is either internal or external? Also, are teachers less satisfied with their teaching environment when the decision source is either internal or external to the school?

In light of these questions, the following hypotheses were examined:

H_0: Whether the decision for change is internally or externally initiated makes no difference in teacher organizational commitment and teacher job satisfaction.

H_{A_1}: Teacher organizational commitment will be higher when planned change is internally initiated than when the planned change decision is externally initiated.

H_{A_2}: Teacher job satisfaction will be higher when planned change is internally initiated than when the planned change decision is externally initiated.

Limitations and Significance of the Study

This study is necessarily limited by the number of variables and schools included in the design of the study. As a result, findings and conclusions are related to and limited by these variables and schools. Nevertheless, the implications from the findings can contribute to a larger body of knowledge concerning the implementation of educational change as well as the organizational change process. Most research on the implementation of planned educational change has been post hoc case studies. This study attempts an empirical analysis based on responses from teachers currently using the change (i.e., IGE). This approach may lead to further findings which will allow for a systematic theoretical perspective for understanding the implementation process and factors which affects this process.

The following chapter will deal with an explanation of the planned change used in this study, the sample design, and data collection activities. Also, efforts are made to operationally define the variables and the research instruments used for data collection are described. In addition, statistical techniques used in analyzing the relations among variables as stated the hypotheses are identified.

CHAPTER II

DESIGN AND METHODOLOGY

This study examined the relationships among the decision source to implement planned change, organizational commitment, and job satisfaction. The dependent variables for the study are organizational commitment and teacher job satisfaction. In general, the hypothesis for the study addresses relationships of the decision source for change and the level of commitment and satisfaction among teachers involved in using a planned change. The planned change under consideration for this study is Individually Guided Education (IGE). The objective of this chapter is to discuss the planned change, the sample design and data collection procedures, the instruments used for providing observable measures of the variables, and the statistical techniques used in the data analysis.

Explanation of the Planned Change: Individually Guided Education (IGE)

The implementation of IGE requires modifications in the physical structure of a school, assumption of new roles and responsibilities, shared responsibility for decision making, and a need for additional materials, personnel, and training. The purpose of this section is to review the relevant aspects of Individually

Guided Education (IGE) and the type of change in the structural relationships of individual implementors that it requires. (For detail discussion of the development and diffusion of IGE, see Klausmeier, 1977; Barrows, Klenke, & Davis, 1978).

An IGE school is a multiunit organization designed for individual instruction of students, for planning and collaborative decisions among staff members, and for providing an environment for articulating vertical levels of authority and horizontal relationships (Lipham & Klausmeier, 1976). The multiunit organization of an IGE school includes Instruction and Research (I & R) units and an Instructional Improvement Committee (IIC). Also, a staff role is included, that of unit leader, for the purpose of coordinating the instructional activities within the I & R unit (Figure 2.1).

The main functions of the I & R unit are to plan, carry out, and evaluate instructional programs for each student within the unit, to engage in staff development activities, to provide preservice teacher education activities, and to plan and conduct a systematic program of research and development (Sorenson, Klausmeier, & Lipham, 1976, p. 6). Each unit consists of a unit leader, three to five staff teachers, paraprofessionals and teacher aides, and 100-150 students. Students within a unit are multiage with a span of 2-4 years. Through collaborative efforts of the unit at its weekly meetings, the interests, capabilities, and skills of

each unit member are considered when developing, planning, conducting, and evaluating the unit's activities.

The Instructional Improvement Committee (IIC) is composed of the principal and unit leaders (Figure 2.1). Within this group the general educational objectives for the school are formulated; system, state, and federal policies affecting the building's educational program are interpreted, implemented, and evaluated; to achieve continuity among units, curricular activities are coordinated; and facilities, resources, and time not accounted for by the units are considered (Klausmeier, 1977, p. 18). When the IIC develops policy and makes decisions, the suggestions and the concerns of unit members are voiced by the unit leader. This approach provides a means for open communication among staff members at the building level.

Description of the two main components of an IGE school has been presented in conceptual or ideal terms. The way individuals interact and the precise structural arrangements, however, are contingent upon the factor's characteristics of the school and its environment. Nevertheless, the multiunit IGE school should facilitate immediate and long-range planning, provide instructional accountability at all levels, increase involvement in shared decision making, improve communication among staff, and define organizational roles and responsibilities (Lipham & Klausmeier, 1976, pp. 10-11).

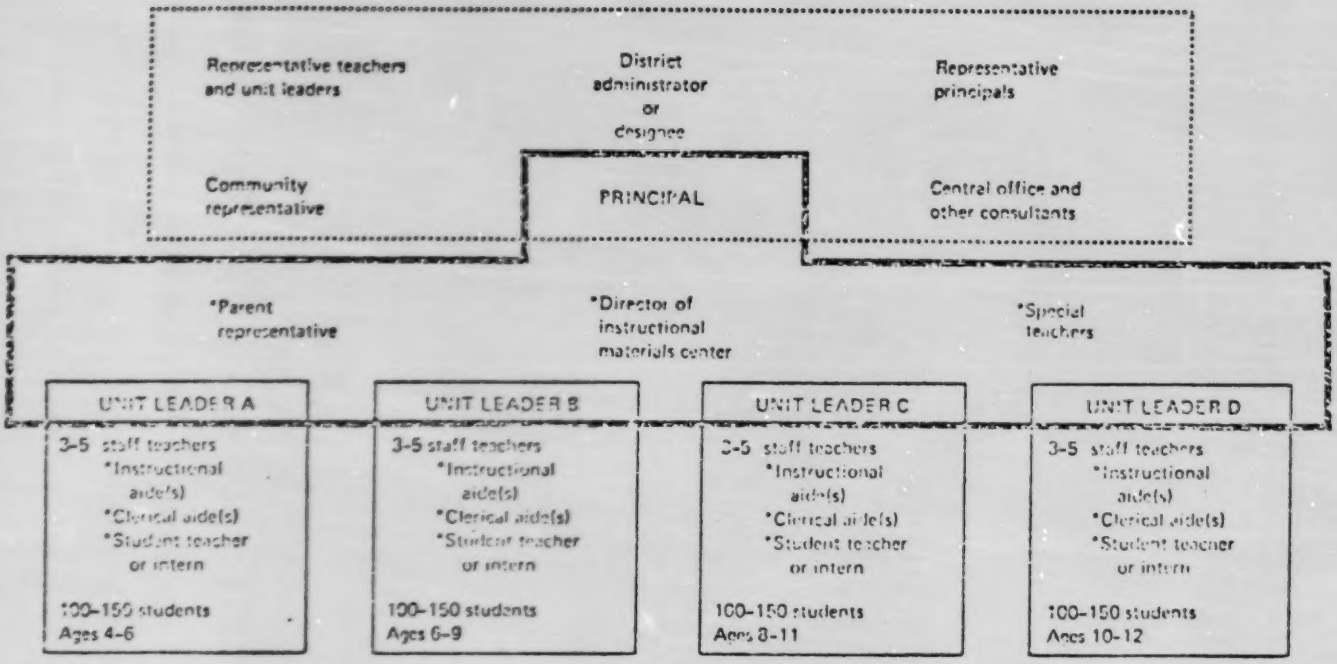

Figure 2.1. Multiunit organization of an IGE school of 400-600 students.

Source: Adapted from H. J. Klausmeier, R. G. Morrow, and J. E. Walter. Individually guided education in the multiunit school. Madison, Wisconsin: Wisconsin Research and Development Center for Cognitive Learning, 1968, p. 19.

Sample Design and Data Collection

This study is designed to measure differences in job satisfaction and commitment in terms of where the decision originated to use Individually Guided Education (IGE) in schools, i.e., either internally or externally. To meet this objective, teachers in six elementary schools currently involved with IGE were selected for the study; at least ten teachers and support staff were randomly selected from each of the schools for a total of 80 participants. A breakdown by school is presented in Table 2.1. Participants in the study were classified by whether the decision for implementing IGE was either internal or external to the school. Based on secondary information from the Studies of Implementation (Barrows, 1979), three schools were identified as having an internal decision source and three schools were identified as having a decision source external to the school. A total of 40 teachers were included in each group (Table 2.2).

The schools differed widely in when the decision to implement IGE had been made (see Table 2.2). For example, School C became involved with IGE as early as 1968, whereas, School D did not use IGE until 1978. Whether a significant turnover at the schools which implemented IGE several years ago might confound the results was of some concern. In order to address this problem, information on teacher turnover and school rosters were obtained from the Public School's Administration. Based on that data, a Chi-

Table 2.1

Number of Study Participants by
Present School Assignment

School	Number of Participants[1]	Percent of School Academic Staff	Percent of Decision Source Group
A*	10	44	25
B*	15	68	37.5
C*	15	52	37.5
D**	15	53	37.5
E**	11	65	27.5
F**	14	86	35

[1]Total number of participants was 80; 40 participated in each decision source cluster.

*Internal decision source school.

**External decision source school.

Table 2.2

Schools by Decision Source and Initial
Year of Involvement with IGE

Schools	Year Became IGE	Decision Source
A	1976	Internal
B	1972	Internal
C	1968	Internal
D	1978	External
E	1974	External
F	1974	External

square analysis was performed. A total of 60 teachers was randomly drawn on the basis of the decision source for change. It was found that a significant difference in the sample population, when comparing the decision source and turnover among IGE schools, did not exist (at $p < .10$) (see Appendix A for analysis). In short, the time span between decisions did not make a difference, at least in terms of turnover, among teaching staff.

Actual data collection began January 24, 1980, and ended February 15, 1980. Permission to enter each school required approval from the Public School's Administration, each principal, and the academic staff. Rosters were obtained from each school to randomly select prospective participants. In some cases participants were selected from a list of teachers volunteering to participate in the study (see Table 2.1 for actual number of participants selected from each school). Each session with participants included filling out a questionnaire packet consisting of background information and two survey instruments (i.e., the Organizational Commitment Questionnaire and the Job Descriptive Index). Afterwards, participants were interviewed in a semi-structured format using five questions. The entire session with participants averaged about 15 minutes. A substitute teacher was used to monitor the teacher's class while the teacher participated in the study.

During and after sessions participants were given a chance to ask questions about the study and to offer any comments. In

most cases the interview sessions were recorded, except, of course, when teachers objected. Also, before completing the questionnaire packet teachers were asked to sign a consent form which acknowledged the preservation of their rights to withdraw from participation at any point in the study (see Appendix C). Code numbers were assigned to each questionnaire packet. Participants were assured that these numbers were to be used only for organizational purposes in the study and that confidentiality of their responses would be maintained.

Instrumentation

In this study it was hypothesized that the decision source for implementing IGE in schools does not effect the teacher's organizational commitment and job satisfaction. The independent variable decision source (external and internal decisions for change) was based on secondary data about how the schools became involved with IGE (see Table 2.2). In order to support this approach, an interview question was developed to get teacher perception of how the decision was made. The question asked was "How was the decision made for your school to use IGE?" In cases where the participant was not at the school when the decision was made, teachers were asked "In your conversation with other teachers or in light of any information you might have, where was the decision made to use IGE in your school?"

Teacher organizational commitment was measured by the Organization Commitment Questionnaire (OCQ) (see Appendix C). The Job Descriptive Index (JDI) (see Appendix C) was used to measure teacher job satisfaction. A description of the development, reliability, and validity of both instruments follows.

The Organizational Commitment Questionnaire (OCQ)

Commitment involves the relative strength of an individual's identification with an involvement in a particular organization (Mowday et al., 1979; Porter et al., 1974; Staw & Salanick, 1977; Buchanan, 1975). Commitment is characterized by at least three related factors: (a) a strong belief in an acceptance of the school organization's goals and values, (b) a willingness to exert a great deal of effort to achieve school goals, and (c) a strong desire to maintain membership in the school (Mowdy et al., 1979, p. 226; Staw & Salanick, 1977, pp. 9-16). To define commitment in this way suggests individual loyalty beyond minimum requirements to perform tasks and participate in school activities. It involves an active relationship with the school such that teachers are willing to give something of themselves in order to contribute to the school's well being.

The OCQ as developed by Porter et al. (1974) is designed to provide a measure of commitment in different types of organizations. The OCQ is a 15-item questionnaire which measures the degree

to which an individual feels committed to their organization. All items are statements to which response is given on a 7-point, Likert-type scale ranging from "strongly disagree" to "strongly agree." The wording of six items was reversed in an attempt to reduce response set bias. A measure of overall commitment for each respondent was derived from the mean score across all items. The internal consistency of the instrument as measured by Cronbach's coefficient alpha ranged from .82 to .93 (Porter et al., 1974, p. 604; Steers, 1977, p. 50). For this study an alpha of .83 ($p < .05$) was found (Table 2.3).

In order to examine the stability of the OCQ over time, test-retest reliabilities have been computed for two samples in which multiple data points were available. With a sample of psychiatric technicians, test-retest reliabilities were $r = .53$, .63, and .75 over two, three, and four months periods, respectively (Mowday et al., 1977, p. 234). For a group of retail management trainees (Porter et al., 1976), test-retest reliability was $r = .75$ over a two month period. In terms of convergent validity, efforts have been made to examine the extent to which the OCQ was related to employees' behavioral intentions to remain with their particular organization (Mowday, 1979, p. 234). Steers (1977) examined 382 employees in large midwestern hospitals and found a convergent validity of -.31 ($p < .001$) when the OCQ was correlated with the employees' intent to remain with the organization. Similarly, Morris, Steers, and Koch (1980), studied the job-related attitudes

Table 2.3

Organizational Commitment Questionnaire (OCQ)
Reliability Data

Number of Cases = 80 Number of Variables = 71

	Mean	Variance	Standard Deviation
Statistics for Scale	75.800	202.218	14.230

	Mean	Minimum	Maximum	Range	Variance
Item Means	5.053	3.787	6.05	2.862	.840
Item Variances	2.992	1.670	4.360	2.690	.857
Inter-item Covariances	.750	-.667	1.67	2.31	.237
Inter-item Correlations	.275	-.243	.713	.956	.036

Reliability Coefficients

Alpha = .834 Standardized Item Alpha = .850

of 243 classified university employees in a large west coast university in relation to the OCQ and found a convergent validity of -.38 ($p < .001$). In each study, a single item assessed the extent to which employees anticipated leaving the organization. Although the magnitudes of the correlations are not overly high the researchers have argued that strong relationships would not be expected in view of the fact that intent to remain or leave represents only one of the primary components in the definition of commitment and a number of personal and environmental factors can be expected to influence intent to remain in addition to one's commitment to the organization.

In light of this finding, it appeared reasonable to collect data to provide background information to teachers' responses to the OCQ. Two interview questions included with the instrument were: (a) how did you obtain your present teaching assignment, and (b) for what reasons might you leave your present school? While the latter question was directly related to the instruments, the first question is more indirect. How the individual enters the organization may have a bearing on willingness to serve or perform and ultimately remain in the school organization (Staw & Salanick, 1977).

Job Satisfaction: Job Descriptive Index

One criticism of studies pertaining to job satisfaction is that efforts to explain job satisfaction have been post hoc,

starting with the question of "How can I measure it?" rather than "What is it?" (Locke, 1969, p. 334). Job satisfaction and satisfaction with various facets of the job have traditionally been measured by simply asking people to rate their jobs or facets of their jobs in a Likert-type scale (see Locke et al., 1964). The satisfaction definitions have differed in the kinds of facets included and in what a researcher means by a facet. Some, for example, have measured satisfaction in different need areas (Porter, 1961), while others have measured satisfaction with such concrete job factors as pay, promotion, and supervision (Smith, Kendall, & Hulin, 1969). Finally, some definitions have entailed direct affect, i.e., satisfaction ratings or weightings (Ewen, 1967; Mikes & Hulin, 1968; Blood, 1969), while others were statements about the causation of satisfaction (Porter, 1961; Alderfer, 1969; Vroom, 1964; Lofquist & Davis, 1969; Lawler, 1968; Mobley & Locke, 1970). All these views, however, share the common problems of specifying which facets are relevant in a given setting to a particular person and in defending their choice of facets.

In order to obtain a measure of job satisfaction, the Job Descriptive Index (JDI) was used (Smith et al., 1969). The JDI has the advantages of containing discriminable and reliable facets of the job environment (i.e., pay, promotion, supervision, work itself, and co-workers); individual respondents are asked to provide a description of the work by responding to adjectives related to the job. Therefore, respondents were not asked

directly how satisfied they are with their present situation, which could lead to distortion and confusion; furthermore, the JDI is short and intuitively understandable and has been used with a wide range of situations.

After collecting the responses, each questionnaire response was summed to obtain an overall job satisfaction score. Each facet was measured by responses to 9 or 18 adjectives reflecting respondents' perception of facets impinging on what they do in the organization or school. Scoring for each response was as follows: yes = 3, ? = 1, and no = 0 for positively discriminating items; and, yes, = 0, ? = 1, and no = 3 for negatively discriminating items.

A test for internal consistency in this study yielded a reliability coefficient of .90 (Table 2.4); this finding is consistent with other studies. Smith et al. (1969), reported test-retest reliabilities for JDI ranging from .45 to .75. These scores are based on responses of 45 employees in a farmer's cooperative after a 3-year interval. During this period, the cooperative underwent major change which, according to Smith impacted the interpretation of the data. The occurrence of the change and levels of reliability scores suggest that the JDI measures elements of satisfaction affected by factors which may vary over time.

In addition to the JDI questionnaire, teachers were asked, "As a teacher involved with IGE, which type of decisions seem to

Table 2.4

Job Descriptive Index (JDI) Reliability Data

Number of Cases = 80 Number of Variables = 71

	Mean	Variance	Standard Deviation
Statistics for Scale	133.750	843.253	29.039

	Mean	Minimum	Maximum	Range	Variance
Item Means	1.883	.200	2.875	2.675	.50537
Item Variances	1.313	.313	2.228	1.914	.247
Inter-item Covariances	.151	-.505	1.486	1.991	.046
Inter-item Correlations	.118	-.305	.740	1.045	.026

Reliability Coefficients

Alpha = .902 Standardized Item Alpha = .905

affect your job performance the most, those decided within the school or those decided outside the school?" The question was designed to get a descriptive account of which type of decisions seem to affect how the teacher presently performs.

Data Analysis

Demographic data was collected for all of the 80 participants. Data was analyzed to provide a demographic profile of participants, a correlation analysis of variables, and testing of hypotheses. The profile presents the frequency and percentage of responses by sex, age, degree level, grade taught, years taught, years taught at present school, and years in an IGE school.

An analytical discussion of the variables based on the collected data is presented in Chapter III. The decision source for implementation (independent variable) was analyzed in terms of years at present school and years in an IGE school. The mean response scores for these two factors was compared in relation to the decision source groupings (i.e., respondents from internal decision schools vs. participants from external decision schools). Teacher organizational commitment and job satisfaction was analyzed according to decision source groupings as well. Based on the mean score from the Organizational Commitment Questionnaire (OCQ) and the mean score from the Job Descriptive Questionnaire (JDI), the basis of comparison according to the decision source grouping will be presented.

A correlation analysis of all variables with responses to the four interview questions (see Appendix C for list of interview questions) conducted for this study. Pearson-Product Moment Coefficient was used for all correlational analysis.

Since the study involves two dependent variables, a multivariate computational procedure was required to test the null hypothesis (H_0) as stated in Chapter I. Hotelling's T^2 was used to test the null hypothesis. This statistical test compares two groups and analyzes whether there is a difference between the groups on one or more of the dependent variables, after adjustments have been made for possible correlations among the dependent variables (Huck, Cormier, & Bounds, 1974, p. 179).

The null hypothesis was tested which operationally examined whether the two groups (internal decision and external decision) had the same population mean for organizational commitment, and that the two groups have the same population mean for job satisfaction. Stated in technical terms, the null hypothesis assumes that the two groups have identical population mean vectors (see Figure 2.2). The null hypothesis was stated as:

H_0: $\bar{X}_1 = \bar{X}_2$: That is, whether the decision for change is internally or externally initiated makes no difference in teacher organizational commitment and teacher job satisfaction when the vector score for each group is compared.

In order to have rejected the null hypothesis of identical mean vectors, the calculated value for T^2 had to exceed the

Internal Decision Source		External Decision Source	
oc_1	js_1	oc_1	js_1
oc_2	js_2	oc_2	js_2
oc_3	js_3	oc_3	js_3
.	.	.	.
.	.	.	.
.	.	.	.
.	.	.	.
oc_n	js_n	oc_n	js_n
$\bar{X}oc_1$	$\bar{X}js_1 = \underline{\bar{X}}_1$ (vector score)	$\bar{X}oc_2$	$\bar{X}js_2 = \underline{\bar{X}}_2$

Figure 2.2. Hotellings T^2: Illustration of the statistical analysis of null hypothesis.

Note. The Hotellings T^2 multivariate statistic will be exact if the underlying assumptions of multivariate normal distribution are met.

critical value of the .05 level.

A significant result in a multivariate t-test would have required further analysis to find out exactly which dependent variable contributed to the overall significant difference (Huck et al., 1974, p. 180). Therefore, if the analysis with Hotelling's T^2 had been found to be significant, each of the separate dependent variables would have been examined. Alternative hypotheses to be examined would be stated as:

H_{A_1}: $\bar{X}_{oc_1} > \bar{X}_{oc_2}$: When the planned change is internally initiated, the mean score ($\bar{X}$) of organizational commitment (oc_1) will be higher than when the planned change is internally initiated (oc_2).

H_{A_2}: $\bar{X}_{js_1} > \bar{X}_{js_2}$: When the planned change is internally initiated, the mean score ($\bar{X}$) of teacher job satisfaction (js_1) will be higher than when the planned change is externally initiated (js_2).

All statistical procedures, including descriptive correlation and multivariate analyses were performed using the Statistical Analysis System (SAS, 1979), a computerized statistical package. SAS takes into account all characteristics of the variables. The probability level for all tests of statistical significance was set at .05.

CHAPTER III

ANALYSIS OF DATA AND FINDINGS

This chapter includes an analysis of data and findings reported in three sections: (a) demographic profile of participants, (b) analytical discussion of variables, and (c) test of hypotheses.

Demographic Profile of Participants

The sample population for this study included 80 elementary school teachers and academic staff from 6 schools in an urban midwest setting (see Table 2.1 for breakdown by schools). The demographic characteristics of the sample are presented in this section. These characteristics are: (a) sex, (b) age, (c) college degree level, (d) grade level taught, (e) years of teaching experience, (f) years taught at present school, and (g) years taught at an IGE school.

Table 3.1 displays the distribution of participants by sex. Females accounted for 86.3%, whereas males represented 13.7% of participants included in the study.

The data presented in Table 3.2 analyses the age distribution of participants. Data were missing for 7 of the 80 participants who elected not to respond to this item. As a result the analysis of data is based on the 73 participants who did give their age. A third of the teachers who participated were between the

Table 3.1

Sex of Participants: Frequency and Percentage

Sex	Frequency	Percentage
Male	11	13.70
Female	69	86.30
Total	80	100.00

Table 3.2

Age of Participants: Frequency and Percentage

Age	Frequency	Percentage
26-31	25	34.2
32-37	14	19.2
38-43	13	17.8
44-49	9	12.4
50-55	7	9.5
56-61	5	6.9
Total	73	100.0

ages of 26 and 31. For this age group the number of participants totalled 25 which represented 34% of those responding to the item. For the age groups 32 through 37 and 38 through 43 the number of participants were fairly equal with 14 (19%) and 13 (17.8%), respectively. Participants who were 44 years old or older combined to total 21 of the 73 respondents; this represented 28.8% of the responding sample.

The college degree level of participants is presented in Table 3.3. Findings from the data analysis indicated that 63.75% of the participants had a bachelor's degree, 22.5% had a master's degree, and 13.75% had a degree or credits beyond the master's degree.

The grade levels taught by participants are described in Table 3.4. The data are organized according to lower primary (grades K-2), intermediate primary (grades 3-4), and upper primary (grades 5-6). Participants who were not presently assigned to a unit or classroom were classified either by their certification or last classroom assignment. Participants who taught at the lower primary level represented 25% of the sample population. The percentage of participants who taught at the intermediate primary level was 38.75%. Participants who taught at the upper primary level was 36.25% of the sampled population.

Presented in Table 3.5 are data which describes the distribution of teaching experience among participants. Participants who had 6 or less years of experience totalled 13, which was

Table 3.3

College Degree Level of Participants:
Frequency and Percentage

Degree Level	Frequency	Percentage
Bachelor's	51	63.75
Master's	18	22.50
Beyond master's	11	13.75
Total	80	100.00

Table 3.4

Grade Level Taught by Participants:
Frequency and Percentage

Grade Level	Frequency	Percentage
Lower primary (K-2)	20	25.00
Intermediate (3-4)	31	38.75
Upper primary (5-6)	29	36.25
Total	80	100.00

Table 3.5

Years of Teaching Experience by Participants:
Frequency and Percentage

Experience	Frequency	Percentage
1- 6	13	16.25
7-12	37	46.25
13-18	17	21.25
19-24	8	10.00
25 or more	5	6.25
Total	80	100.00

16.25% of the sample. Most participants had from 7 to 12 years of experience, 37 or 46.25% of the sample. The next largest group was between 13 and 18 years of experience; for this group the total number was 17, representing 21.25% of the sample. The remaining participants who had 19 or more years of teaching experience totaled 13 (19-24 years experience was 8 or 10% of the sample; 25 or more was 5, which was 6.25% of the sample).

The data in Table 3.6 describe the number of years participants have taught in their current school assignment. Most of the participants (47, which represented 58.75% of the sample), have been at their present teaching position for 5 or less years. Participants who have been at their present school assignment for 6 to 9 years totaled 22, 27.5% of the sample; and 11 participants have been at their present school assignment for 10 or more years, which represented 13.75% of the total participating in the study.

Presented in Table 3.7 are data which describe the number of years participants have taught in an Individually Guided Education (IGE) school. Most teachers, 62.5%, had taught five years or less in an IGE school. The next largest group of participants had from six to nine years of teaching experience in an IGE school. And, finally, participants who had ten or more years of experience in an IGE school represented 5.0% of the sample.

Table 3.6

Years at Present School by Participants:
Frequency and Percentage

Years at Present School	Frequency	Percentage
1-5	47	58.75
6-9	22	27.50
10 or more	11	13.75
Total	80	100.0

Table 3.7

Years of Experience in an IGE School by Participants:
Frequency and Percentage

Years in IGE School	Frequency	Percentage
1-5	50	62.5
6-9	26	32.5
10 or more	4	5.0
Total	80	100.0

Summary of Demographic Data

Most participants in the study were female, 86% of the total, while males represented less than 14% of the total. In terms of age, the majority of the participants were between 26 and 43 years of age which was 52 of the 73 (71%) indicating their age. In contrast, 21 (29%) of the responding participants were between 44 and 61 years of age. Bachelor's degrees were held by 64% of all participants; those who had master's degree or credits beyond represented 46% of the sample. The distribution by grade level taught was somewhat even; participants who taught at the lower primary (grades K-2) included 25% of the sample; those who taught at the intermediate primary level (grades 3-4) included 39%; and those who taught at the upper primary level (grades 5-6) included 36%.

The data describing the distribution of teaching experience among participants indicated most had between 7 and 12 years of teaching experience, which represented 46% of the sample; participants with 6 or less years of experience included 16% of sample and 38% had 19 or more years of teaching experience.

Considering the total number of years that participants had been at their present teaching assignment, it was noted that most had tenure or five or less years (59%). This percentage far surpassed those participants who were in the six to nine years group (27%) and the ten or more years group (14%). Finally, examin-

ation of the data on the years of experience that participants had at an IGE school showed that most had five or less years of experience in an IGE school (62.5%). In comparison, those who had from six to nine years of experience in an IGE school represented 32.5% of the sample, and those who had ten or more years of experience represented 5.0% of the sample.

Analytical Discussion of Variables

Independent Variable: Decision Source for Implementing IGE

The independent variable, decision source, was examined in the study by dividing the sample into dichtomous grouping according to where the decision was made to use IGE. One group consisted of academic staff participants from schools identified as having an internal decision source to use IGE. A second group consisted of participants from schools identified as having an external decision source to use IGE.

In order to compare the two decision source groupings, participants' responses for each group were analyzed on the basis of years at present teaching assignment and years of experience in an IGE school. Table 3.8 illustrates the findings from this comparative analysis. The internal decision source group had a mean of 5.9 years and a standard deviation of 3.0 years when considering the years participants had been at their present teaching assignments. For the external decision source group, the mean was iden-

Table 3.8

Independent Variable: Decision Source for Implementing IGE Compared on the Basis of Years at Present School and Years Taught at an IGE School

Decision Source Group	Years at Present School	Years Taught at an IGE School
Internal Decision Group		
Mean	5.9	6.2
Standard Deviation	3.0	3.0
Range		
Minimum	1	1
Maximum	13	13
External Decision Group		
Mean	5.9	3.8
Standard Deviation	4.9	1.8
Range		
Minimum	1	1
Maximum	20	9

tical to the internal decision group, that is, 5.9 years; the standard deviation of years at their present teaching assignments was larger by 1.9 years (i.e., 4.9 years). For the internal decision source grouping, the number of years ranged from 1 to 13 years, whereas for the external decision group the number of years ranged from 1 to 20 years.

When comparing the decision source groups on the basis of years taught at an IGE school, the internal decision group had a mean of 6.2 years with a standard deviation of 3.0 years while the external decision source group had a mean of 3.8 years with a standard deviation of 1.8 years. The range of years for internal decision source group was from 1 to 13 years, while it was 1 to 9 years for the external decision source group.

Dependent Variables: Organizational Commitment and Job Satisfaction

Measures were obtained for participants' organizational commitment and job satisfaction through the use of survey instruments. The organizational commitment measure was obtained by using Porter's (1974) Organizational Commitment Questionnaire (OCQ). The job satisfaction measure was obtained by using Smith, Hulin, and Kendall's (1969) Job Descriptive Index (JDI). The data presented in Table 3.9 describes the findings based on the 80 responses to the two survey instruments (i.e., the OCQ and the JDI). An overall mean score of 75.8 with a standard deviation

Table 3.9

Dependent Variables: Organizational Commitment and Job Satisfaction

Variables	N	Mean	Standard Deviation	Range Minimum	Range Maximum
Organizational Commitment	80	75.8	14.0	25.0	102.0
Job Satisfaction	80	133.7	29.0	53.0	186.0

of 14.0 was found for organizational commitment. At the same time, an overall mean score of 133.7 with a standard deviation of 29.0 was found for job satisfaction. The overall range of scores for organizational commitment was from 25 to 102 points, while the overall range of scores for job satisfaction was from 53 to 186 points.

Interview Data

Interview data were collected to provide background information for discussion and analysis of variables. The data presented in Table 3.10 provide a descriptive account of responses to the four main interview questions used during data collection. Question 1 asked, "How did you become involved with your present teaching assignment?" "Requested transfer" includes those participants who either asked for an assignment at their present school, asked for an assignemtn in an IGE school, or requested to remain

Table 3.10

Response to Interview Questions: Frequency and Percentage

Question		Frequency	Percentage
1.	How did you become involved with your present teaching assignment?		
	Requested transfer	51	63.75
	Mandated transfer	29	36.25
	Total	80	
2.	To the best of your knowledge, where did the decision originate for your school to use IGE?		
	Within the school	25	38.5
	Outside the school	40	61.5
	Total	65	
3.	As a teacher involved with IGE, which type of policy decisions seem to affect your job performance the most, those decided within the school or those decided outside the school?		
	Decisions within	44	55.00
	Decisions outside	36	45.00
	Total	80	
4.	In general, why might you leave your present teaching assignment?		
	Program (IGE) related	29	37.2
	Non-program related	49	62.8
	Total	78	

in the school after the decision was made to implement IGE; 63.75% of respondents could be identified in this group. On the other hand, the "mandated transfer" group consisted of those respondents who were transferred as a result of central administration decision, e.g., desegregation and excessing. This group comprised 36.25% of the study's participants.

Question 2 asked for participants' perception of the decision source for using IGE in their particular school. Of the 80 participants, 15 indicated that they had no knowledge of where the decision originated. Of the 65 participants responding to the question, 61.5% indicated that the decision originated from outside the school while 31.5% indicated that the decision originated from within the school.

In Question 3, participants were asked to indicate which of the two types of decision, internal or external, seemed to affect their job performance more as an IGE teacher. Of the participants, 55% indicated that decisions within the school affected their job performance more while 45% indicated that decisions outside the school affected their job performance more.

When participants were asked in Question 4 the reason they might leave their present school, 62.8% of the participants indicated that they might leave for non-program-related reasons, whereas 37.2% indicated that they would leave for program-related reasons.

Further investigation, as seen in Table 3.11, illustrates a correlation analysis between the responses to interview questions, responses to the survey instruments for organizational commitment and job satisfaction, and the grouping of participants according to decision source for implementation. With $p < .05$ level of significance, two correlations were significant: (a) a correlation of .26 ($p < .025$) was found between the decision source groupings and how participants entered their present teaching assignement, and (b) a correlation of .68 ($p < .001$) was found between the decision source groupings and participants' perception of where the decision originated to use IGE in the school.

Testing of Hypotheses

The following hypotheses were examined:

H_0: Whether the decision for planned change is internally or externally initiated makes no difference in teacher organizational commitment and teacher job satisfaction.

H_{A_1}: When the planned change decision is internally initiated, organizational commitment will be higher than when the planned change decision is externally initiated.

H_{A_2}: When the planned change decision is internally initiated, teacher job satisfaction will be higher than when the planned change decision is externally initiated.

Hotelling's T^2 was used to test the general null hypothesis (H_0) at an alpha level of .05. Based on the assumptions of the

Table 3.11

Correlational Analysis of Interview Questions
with Independent and Dependent Variables

Items	Interview Questions			
	Question 1	Question 2	Question 3	Question 4
Decision Source				
Coefficient	.2597*	.6763*	.0502	-.0993
Significance	.025	.0001	.658	.3868
Cases	74	65	80	78
Organizational Commitment				
Coefficient	.2103	-.0187	-.1062	-.0411
Significance	.0721	.882	.348	.720
Cases	74	65	80	78
Job Satisfaction				
Coefficient	.0590	.05291	-.0287	.0639
Significance	.6173	.6173	.8003	.578
Cases	74	65	80	78

*Significant correlations at $p < .05$.

Hotelling's T^2 statistic, the general hypothesis was written in the following operational format:

H_0: $\bar{X}_1 = \bar{X}_2$: Whether the decision for change is internally or externally initiated makes no difference in teacher organizational commitment and teacher job satisfaction when the vector scores for the groups are compared.

Table 3.12 presents analysis of the hypothesis based on the Hotelling's T^2 statistic. Through the use of Statistical Analysis System (SAS), the mean vector scores for both dependent variables were compared. The analysis yielded an F of 0.54 with degrees of freedom = 2,77; Prob $>$F = 0.585. Based on this finding, the null hypothesis was accepted, indicating that initiation of the planned change decision by the two decision groups (externally and internally) is not related to group difference on either organizational commitment or job satisfaction. Because the null hypothesis was accepted, it was not appropriate to continue the analysis in order to test the alternative hypotheses H_{A_1} and H_{A_2} (Huck et al., 1974, Chapter IX).

Table 3.12

Multivariate Analysis of Variance of General Hypothesis

Items	Mean Score	
	Internal Decision Source	External Decision Source
Organizational Commitment	76.075	75.525
Total Job Satisfaction	207.900	201.600

N = 80; n = 40

Alpha = .05

F = 0.54 (DF = 2,77; Prob>F = 0.585)

CHAPTER IV

SUMMARY, IMPLICATIONS, AND CONCLUSIONS

This chapter contains three sections. The first section consists of an overview of the study. Section two presents a discussion of the findings and implications. And the third section presents the conclusion for the study.

Summary of the Study

The initial objective of this study was to design and conduct research that would examine the relationship between external decision relations for planned educational change (deliberate, major policy/program changes) and how planned change is implemented or used in a school organization as indicated by participants' perception of organizational commitment and job satisfaction. An external decision relation was defined as a process by which policies and programs enter an organization via an outside agency's initiative (e.g., state legislature, congress, court, and central office).

Review of the literature on planned change and organizational management theory showed at least two major findings: (a) when planned change is externally initiated, those who must implement the change at the organizational level (e.g., teachers) are likely to be less committed and satisfied than if the change was initiated from within the organization (e.g., Abbott, 1969, & Katz, 1968, have

argued that successful change should be from the bottom up); (b) when change is initiated by external agencies, those who initiate the change must utilize strategies which will induce the implementors to become committed to the change and thereby comply with the objectives of the new policy or program (French, 1964; Herriott & Gross, 1979).

As a result of the review of literature, three variables were identified for the study: (a) the decision source or origin of planned change initiative, (b) organizational commitment, and (c) job satisfaction of those who implement or use the new policy or program. The decision source for planned change is indicative of the type and nature of relationship existing at the time of the decision to adopt the planned change. Organizational commitment refers to an organization member's identification and agreement with the tasks and goals that the organization will carry out or implement. Katz has argued that individuals are likely to be more committed to implementing the change when it is internally initiated because initiators are likely to feel change is for the good of the organization, and, therefore, identify with the objectives. Tom Burns, in his discussion of the micropolitics within the organization, argued that the location of the decision source is related to individual member commitment or the belief that the planned change provides desired resources and objectives. Commitment can be defined as identification with the change and willingness to perform the task

entailed in light of the resources and opportunities that the change brings to the organization. Job satisfaction is viewed as an indicator of the integration process within the organization. Stogdill (1965) defined the integration process as the extent to which the organization and its members interact in order to maintain structural and functional relations in work settings. According to Stogdill, facets of job satisfaction--work, co-workers, supervision, pay--are highly correlated with how organizational members perform in the school organization as a result of the planned change (see Smith et al., 1969, for discussion of the correlational analysis of the JDI).

These three variables were not presented as exhaustive correlates of the implementation process. Nevertheless, they seem to warrant further attention in understanding decision relationships and possible impact on the implementation process.

The research question under investigation was stated as follows: "Does the decision source for change make a difference to a teacher's or implementor's organizational commitment and job satisfaction?" The research question was translated into the null hypothesis to read: "Whether the decision for change is internally or externally initiated (the decision source) makes no difference in a teacher's organizational commitment and job satisfaction."

In order to test the null hypothesis, a study design was developed. The planned change for the study was Individually Guided Education (IGE). Among the reasons for focusing on IGE were that it requires massive if not total changes in a traditional

school setting to a multiunit classroom setting; it requires an overhaul in a teacher's instructional and extracurricula behavior within the organization--since the teacher was to operate within a unit, team teach, and individualize student instruction; and, finally, in order to implement IGE more resources are needed in terms of instructional specialty staff (reading/math), new materials, paraprofessionals to assist the teacher and to allow for planning. In short, IGE represents a definitive planned change effort.

The sample design for the study included teachers from six schools in an urban midwestern city. Each school was currently involved with using IGE. Based on secondary and interview data about how IGE was adopted into the school, each school was identified as either an internally initiated decision school or an externally initiated decision school. Three schools were identified as having externally initiated decisions and three schools as having internally initiated decisions. Teachers were randomly selected from each school with 40 teachers participating from each decision source grouping.

The data collection and analysis consisted of each participant completing a questionnaire packet which included background data and two research instruments, the Organizational Commitment Questionnaire (OCQ) developed by Porter et al. (1974) and the Job Descriptive Index (JDI) developed by Smith and her associates at Cornell and Bowling Green State Universities (Smith, Hulin, & Kendall, 1969). After completing the questionnaire packet, par-

ticipants were asked four interview questions, which included how they entered their job and the reasons they might leave their present teaching assignment.

In order to statistically test the hypothesis, the Hotelling's T^2 statistic was used. The alpha level for significance was set at .05. The results of the test based on the data analysis showed that there was no overall significant effect. Therefore, the null hypothesis was accepted, that is, the decision source for change makes no difference to a teacher's organizational commitment and job satisfaction.

Discussion of Findings and Implications

A comparison of decision source groupings on the basis of years at present school did not indicate any major differences. Teachers on the average had taught at present school the same number of years (5.9 years) with a difference of 1.9 years in spread of the years between the groups. Teachers in the internal decision group had almost twice the years of experience with IGE than the external group (3.8 years) which was most likely due to the years of school involvement with IGE. The earliest involvement with IGE within the internal decision group was 1968, whereas the earliest involvement for the external decision source group was 1974 (Table 4.1). Furthermore, two out of the three schools in the external decision group were built recently as IGE schools and had to recruit most of its academic staff when IGE was initiated in the school. The

Table 4.1

Characteristics of Schools Included in Study

School	Year Became IGE	Original School Structure
A*	1976	Non-IGE
B*	1972	IGE
C*	1968	Non-IGE
D**	1978	Non-IGE
E**	1974	IGE
F**	1974	IGE

[1] refers to whether the design of structure was designed for IGE (i.e., multiunit, open-class settings) or whether the structure is traditional.

* Internal Decision School

** External Decision School

opposite held for the internal decision group where schools had traditional instructional structures and most of the staff remained at the schools when IGE was implemented. The difference in years of experience with IGE was not central to the study. Nevertheless, years of experience with a planned change such as IGE is an area that warrants further attention in future research.

An analysis of the dependent variables on the basis of participant scores on the OCQ and JDI research instruments indicated that overall organizational commitment and job satisfaction was fairly high. With a range of scores from 25 to 102 on the OCQ, the mean score for commitment was 76.0. For job satisfaction, the mean score of 134.0 was given a range of scores from 53 to 186.

Responses to these scores are acceptable on the basis of the internal consistency reliabilities for the OCQ and JDI as reported in Chapter II. The reliability measures of .83 ($p \leq .05$) for the Organizational Commitment Questionnaire and .90 ($p \leq .05$) for the Job Descriptive Index were comparable to the measures reported by the developers of the instruments (Porter et al., 1974; Mowday et al., 1979; Smith et al., 1969).

A correlational analysis of the independent and dependent variables with interview question data (see Table 3.11) produced two significant correlations (at $p \leq .05$). Both correlations involved the independent variable, i.e., the decision source for implementing IGE. One of the correlations was between the decision source variable and teacher perception of the decision source for implementing IGE in their particular school. A correlation coefficient of .68 ($p \leq .001$) was found between the two responses. This suggests that while a significant relationship is evident there is, nevertheless, a discrepancy among teachers as to where the decision was made to implement IGE.

Whether the decision was internal or external some teachers felt that the change was essentially the principal's, school board, or an elite group of teachers or administrators who wanted to use IGE. In this case teachers viewed participation as a formality or perfunctional in order to get general acceptance or approval. The nature of decisional participation (e.g., meaningful vs. per-

functional) may explain the discrepancy between actual and perceived decisional source. The nature of decisional participation among the implementors (and decision makers) of change, therefore, may provide additional information to understanding the acceptance of the change and how it will be used in the school organization.

A second significant correlation was found for the decision source and how teachers entered their present school assignment. A coefficient of .26 ($p \leq .025$) was reported between the two variables. Though the magnitude of the coefficient is relatively low, the significance of the relationship, nevertheless, has implications for further investigation.

One area for further investigation would be to look at the motives for individuals entering, exiting, or remaining within the organization when change takes place. In this study, interview data on how the individual entered the organization were presented as mandated and requested transfer. The objective was to illustrate the choice of entrance into the organization among teachers. In order to distinguish these choices, however, teachers who elected to remain within the organization when IGE was set for implementation were grouped with those who had requested a transfer. The assumption here was that to remain in the organization should reflect the same willingness to teach or use IGE as those who

requested transfer to an IGE school. The group electing to remain within a changing organization, however, may have had different motives (e.g., may have felt they could alter or subvert change by remaining; did not want to give up seniority; liked the location of the school) than those who wanted to be transferred to the school. In essence, the classification scheme was based on how the teacher became involved with IGE at their present teaching assignment.

A more useful or appropriate strategy might involve looking at why a teacher remained or requested transfer to the school or to teach in a certain area. Hirschman (1972), for example, has argued that individual decision making about leaving or remaining with an organization is based on the belief that change will lead to improvements. Figure 4.1 illustrates Hirschman's argument by showing four possible decisions that can be made by the individual: (a) stay and be silent, (b) stay and be vocal, (c) exist and remain silent, and (d) exit and be vocal (Birch, 1975). Each decision is based on possible improvement within the organization. Though Hirschman's model is rational and does not take into account cases in which entrance or exit is by external mandate (e.g., central office decision), it may provide a productive point for additional investigation in this area.

Finally, this study examined the relationships among the decision source for change, organizational commitment, and job satisfaction. The multivariate analysis of the independent and dependent variables did not add information in the form of a sig-

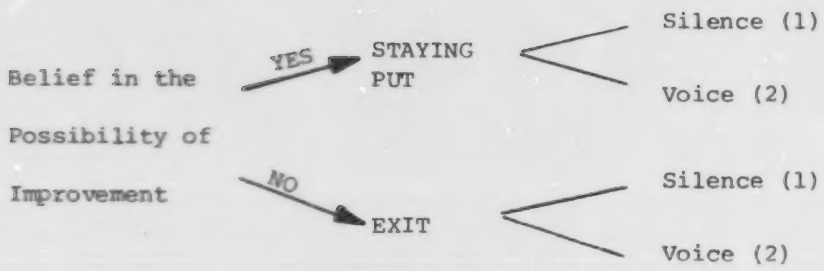

Figure 4.1. Choices facing a member of the school organization.

Source: A. H. Birch, Economic models in political science: The case of 'exist, voice, and loyalty.' British Journal of Political Science, 1975, 5, 65-82.

nificant statistical relationship of the null hypothesis. Nevertheless, the analysis provides a basis for speculative statements for research and practice when considering the change decision source and how teachers (or implementors) perform the activities entailed with the change.

Katz's (1968) discussion on autonomy within the organization, for example, presents a theoretical basis for further investigation of the impact of change on the implementors of change (Figure 4.2). According to Katz's approach attention should be given the rules and policy decision which governs the implementor's action throughout the implementation process. One implication from this approach is that it is possible for the implementor to be committed and satisfied

Behavior	Directly Specified Rules	Indirectly Specified Rules
Spheres of Autonomous Behavior	Rules act as broad guidelines to behavior, specify areas of autonomy within organizational tasks.	Narrowly defined tasks permit autonomy to exist externally to work tasks, yet enacted in the organization.
Spheres of Controlled Behavior	Tasks are governed by detailed specifications.	Rules set limits to autonomy: adherence to the rules based on informal recognition by members in the organization.

Figure 4.2. Interactive model between behavioral autonomy and structural constraints.

Source. Based on Katz's discussions of individual/organization autonomy in the performance of work. Autonomy in organizations, New York: Random House, 1968.

with IGE or any other planned change but, nevertheless, discontented with the policy decision which intervene on their efforts to perform the tasks of the change. This distinction may suggest why implementors may be defensive or resistant to the change during implementation when they have agreed that the change should take place (Edwards, 1973; Starling, 1973; Tushingham, 1974; Winkelpleck, 1974).

Future research might consider measures which address the implementor's willingness to comply with policy decisons (either internally or externally initiated) in relation to the planned change; goal or domain consensus among teachers (i.e., the extent to which a sense of agreement that change is good or bad for the

ment that change is good or bad for the school organization); changes the flow and type of resources entering the school, these changes would include not only financial resources but personnel resources as well; and changes in autonomous privileges within the school, this could include decisions about classroom activities, attending conferences with fellow implementors, and socio-political functions within and between schools.

Conclusions

The implementation of planned educational change is a complicated and unorganized area of study. Certainly further research is warranted. This study attempted to examine the relationships among the decision for change, organizational commitment, and job satisfaction. The multivariate analysis led to acceptance of the null hypothesis that the decision source for implementing IGE did not make a difference to a teacher's organizational commitment and job satisfaction. This finding, however, cannot be considered conclusive. In the discussion and implication of the study's finding, several suggestive areas for further research were identified. They are as follows:

1. Difference in years of experience with a planned change may be useful for further research attention.

2. The nature of decisional participation could account for discrepancies between actual and perceived decision source for implementation. Therefore, attention should be given to the

relationship between meaningful vs. perfunctional decisional participation, not only prior to implementation but especially during actual implementation of planned change.

3. The motives for remaining with or entering into an organization implementing planned change may be important to understanding and explaining the implementor's commitment and satisfaction with the planned change.

4. A distinction might be made between the decision source and the impact of the accompanying costs (rules and accountability policies and loss of resources) and benefits (additional resources--both financial and personnel) associated with the change. This distinction suggests that measures are needed to address areas such as rule compliance, changes in organizational resources, and changes in autonomous privileges (e.g., decisional flexibility in the classroom or within the school and extra demands on the teacher's instructional time).

Many researchers who have examined or discussed the implementation of planned change have assumed a decision source for change either originating from within or outside of the organization. The importance of the origin of the decision is that it has dictated a researcher's or practitioner's view of the acceptability of the change by the implementors of change and the management strategies of those who oversee the operations of implementing planned change (Abbott, 1969; Gross et al., 1965; Herriott & Gross, 1979; Fullan & Pomfret, 1977; Roberts, 1979). Based on the observations cited

in this study it may be more appropriate to consider the impact of the decision on the organization or its implementors and motives of their response to the change. Bardach (1979) has viewed policy implementation in terms of "games" which consists of manuevers and counter manuevers where not only are objectives of the change actualized but individual's and organization's objectives as well. Bardach's metaphorical use of games is useful in that it provides a context in which to analytically discuss decisional impacts (either from internal or external sources) and individual motives for implementing (or not implementing) change. This approach should suggest to managers of change that successful change may be contingent upon the ability of the organization to perform within the context of the value orientation (e.g., what they believe is good for the student, the school, and the implementors, Landau & Stout, 1979), rather than a context of policy directives which attempts to control how planned change is implemented (Fullan & Pomfret, 1977; Roberts, 1978).

BIBLIOGRAPHY

Abbott, M. Hierarchical impediments to innovations in education organizations. In F. Carver and T. Sergiovanni (Eds.), Organizations and human behavior: Focus for schools. New York: McGraw-Hill, 1969.

Alderfer, C. P. An organizational syndrome. Administrative Science Quarterly, 1967, 12, 440-460.

Aldrich, H. E. Organizations and environments. Englewood Cliffs, New Jersey: Prentice-Hall, Inc., 1979.

Barrows, L., Klenke, W., & Heffernan, J. Descriptive report of year-one findings/adoption of innovation (Technical Report No. 529). Madison, Wisconsin: Wisconsin Research and Development Center for Individualized Schooling, 1979.

Barrows, L. Findings and implications of the thirteen school study. Paper presented at the Annual Meeting of the American Educational Research Association. Madison, Wisconsin: Wisconsin Research and Development Center for Individualized Schooling, 1980.

Baldridge, J. V., & Deal, T. E. (Eds.). Managing change in educational organizations. Berkeley, California: McCutchan, 1975.

Bardach, E. The implementation game: What happens after a bill becomes law. Cambridge, Massachusetts: The MIT Press, 1979.

Barnard, C. I. The functions of the executive. Cambridge, Massachusetts: Harvard University Press, 1938.

Birch, A. H. Econcomi models in political science: The case of exit, voice, and loyalty. British Journal of Political Science, 1975, 5, 65-82.

Blau, P. Interdependence and hierarchy in organizations. Social Science Research, 1972, 1, 1-24.

Blau, P. Exchange and power in social life. New York: John Wiley and Sons, Inc., 1964.

Buchanan, B. Building organizational commitment: The socialization of managers in work organizations. Administrative Science Quarterly, 1974, 19, 533-546.

Burns, T., & Stalker, G. The management of innovation. London: Tavistock, 1961.

Burns, T. Micropolitics: Mechanisms of institutional change. Administrative Science Quarterly, 1963, 6, 257-281.

Coleman, J. Conflicting theories of social change. In G. Zaltman (Ed.), Processes and phenomena of social change. New York: Wiley Interscience, 1973.

Dill, W. R. Environment as an influence on managerial autonomy. Administrative Science Quarterly, 1958, 2, 409-43.

Duncan, R. Characteristics of organizational environments and perceived environmental uncertainty. Administrative Science Quarterly, 1972, 17, 313-27.

Edwards, J. K. A study of factors influencing the internalization of innovations by teachers within a school system. Miami University-Ohio: Unpublished dissertation, 1973.

Emerson, R. M. Power-dependence relations. American Sociological Review, 1962, 27, 31-40.

Evan, W. The organization set: Toward a theory of interorganizational relations. In J. Thompson (Ed.), Approaches to organizational design, Pittsburgh, Pennsylvania: University of Pittsburgh Press, 1966, 175-90.

Ewen, R. B. Weighting components of job satisfaction. Journal of Applied Psychology, 1967, 51, 68-73.

French, J. R. P., Jr. Laboratory and field studies of power. In R. L. Kahn & E. Bouldingl (Eds.), Power and conflict in organizations. New York: Basic Books, Inc., 1964, 33-51.

Fullan, M. & Pomfret, A. Review of research on curriculum implementation. Toronto: Ontario Institute for Studies in Education, 1975.

Gaddis, M. T. Organizational and personal constraints on the successful institutionalization of individually guided education. University of Wisconsin-Madison: Unpublished dissertation, 1977.

Gross, N., Giacquinta, J., & Berstein, M. Implementing organizational innovations: A sociological analysis of planned educational change. New York: Basic Books, 1971.

Herriott, R. E., & Gross, N. (Eds.). The dynamics of planned educational change. Berkeley, California: The Free Press, 1979.

Hirschman, A. E. Exit, voice, and loyalty. Cambridge, Massachusetts: Harvard University Press, 1972.

Huck, S. W., Carmier, W. H., & Bounds, W. G., Jr. Reading statistics and research. New York: Harper and Row, 1974.

Hulin, C. L., & Blood, M. R. Job enlargement, individual differences, and worker responses. Psychological Bulletin, 1968, 69, 41-55.

Katz, D., & Kahn, R. Social psychology of organizations. New York: John Wiley and Sons, Inc., 1966.

Katz, F. E. Autonomy and organization: The limits of social control. New York: Random House, 1968.

Klausmeier, H. J., Morrow, R. G., & Walter, J. E. Individually guided education in the multiunit elementary school. Madison, Wisconsin: Wisconsin Research and Development Center for Cognitive Learning, 1968.

Klausmeier, H. J., Rossmiller, R. A., & Saily, M. (Eds.). Individually guided elementary education concepts and practices. New York: Academic Press, 1977.

Landau, M., & Stout, R., Jr. To manage is not to control: Or the folly of type II errors. Public Administration Review, 1979, 39, 148-156.

Lawrence, P. R., & Lorsch, J. W. Organization and environment. Cambridge, Massachusetts: Harvard University Press, 1967.

Lawler, E. E., & Hall, D. T. Relationship of job characteristics to job enlargement satisfaction, and intrinsic motivation. Journal of Applied Psychology, 1970, 54, 305-312.

Levin, H. M. A radical critique of educational policy. Journal of Education Finance, 1977, 3, 9-31.

Lofquist, L. H., & Davis, R. Adjustment to work. New York: Appleton-Century-Crofts, 1969.

Lipham, J. M., & Klausmeier, H. J. The development and description of IGE. In J. M. Lipham & M. J. Fruth, The principal and individually guided education. Reading, Massachusetts: Addison-Wesley Publishing Co., 1976.

Locke, E. A. What is job satisfaction? Organizational Behavior and Human Performance, 1969, 4, 309-336.

McLaughlin, M. W. Implementation of ESEA title 1: A problem of compliance. Teacher College Record, 1976, 77(3), 398-415.

March , J. G., & Simon, H. Organizations. New York: McGraw-Hill, 1961.

Mikes, P. S., & Hulin, C. L. Use of importance as a weighting component of job satisfaction. Journal of Applied Psychology, 1968, 52, 394-398.

Miles, M. B. Innovations in education. New York: Bureau of Publications, Teachers College, Columbia University, 1964.

Mobley, W. H., & Locke, E. A. The relationship of value importance to satisfaction. Organizational Behavior and Human Performance, 1970, 5, 463-483.

Morris, J. H., Steers, R. M., & Koch, J. L. Influence of organizational structure on role conflict and ambiguity for three occupational groupings. Academy of Management Journal, 1980.

Mowday, R. T., Steers, R. M., & Porter, L. W. The measurement of organizational commitment. Journal of Vocational Behavior, 1979, 14, 224-247.

Mowday, R. T., Steers, R. M., & Porter, L. W. Measurement of organizational commitment. Journal of Vocational Behavior, 1979, 14.

Porter, L. W. Job attitudes in management I: Perceived deficiencies in need fulfillment as function of job level. Journal of Applied Psychology, 1962, 46, 375-384.

Porter, L. W., Steers, R. M., Mowday, R. T., & Boulian, P. V. Organizational commitment, job satisfaction, and turnover among psychiatric technicians. Journal of Applied Psychology, 1974, 59, 603-609.

Porter, L. W., Crampton, W. J., & Smith, F. J. Organizational commitment and management turnover: A longitudinal study. Organizational Behavior and Human Performance, 1976, 15, 87-98.

Pressman, J. L., & Widavsky, A. B. Implementation. Berkeley, California: University of California Press, 1973.

Roberts, J. M. E. Implementation of innovations in educational organization and instruction (Working Paper). Research for Better Schools, Inc., 1978.

Salancik, G. R. Commitment and the control of organizational behavior and belief. In B. M. Staw & G. R. Salancik (Eds.), New directions in organizational behavior. Chicago: St. Clair Press, 1977, 1-54.

Sheldon, M. E. Investments and involvements as mechanisms producing commitment to the organization. Administrative Science Quarterly, 1971, 16, 142-50.

Shirley, R. C. An interactive approach to the problem of organizational change. In P. H. Burgher (Ed.), Changements, Lexington, Massachusetts: D.C. Heath Co., 1979, 95-109.

Simon, H. A., Smithburg, D. W., & Thompson, V. A. Public administration, New York, 1950.

Smith, P. C., Kendall, L. M., & Hulin, C. L. The measurement of satisfaction in work and retirement. Chicago: Rand-McNally, 1969.

Sorenson, J. S., Klausmeier, H. J., & Lipham, J. M. Definition development, description of IGE: An overview. In J. S. Sorenson, M. Poole, & L. H. Joyal, The unit leader and individually guided education. Reading, Massachusetts: Addison-Wesley Publishing Company, 1976.

Starling, W. M. An unsuccessful attempt to implement an educational innovation: A case study. University of Oregon: Unpublished dissertation, 1973.

Statistical analysis system (SAS). Statistical Analysis System Institute, Raleigh, North Carolina, 1979.

Staw, B. M., & Salancik, G. R. (Eds.). New directions in organizational behavior. Chicago, Illinois: St. Clair Press, 1977.

Staw, B. M. Motivation in organizations: Toward synthesis and redirection. In B. M. Staw & G. R. Salancik (Eds.), New directions in organizational behavior. Chicago, Illinois: St. Clair Press, 1977, 55-95.

Steers, R. M. Antecedents and outcomes of organizational commitment. Administrative Science Quarterly, 1977, 22, 46-56.

Stiles, L. J., & Robinson, B. Change in education. In G. Zaltman (Ed.), Processes and phenomena of social change. New York: Wiley Interscience, 1973.

Stogdill, R. Dimensions of organization theory. In J. D. Thompson (Ed.), Approaches to organizational design. Pittsburgh, Pennsylvania: University of Pittsburgh Press, 1966, 3-56.

Thompson, J. D. Organizations in action. New York: McGraw-Hill, 1967.

Tushingham, G. W. A study of some factors affecting implementation of organizational innovations in Ontario public secondary schools. Wayne State University: Unpublished dissertation, 1974.

Vroom, V. H. Work and motivation. New York: John Wiley and Sons, Inc., 1964.

Warren, C. The non-implementation of EEP: All that money for business as usual. Teacher College Record, 1976, 77(3), 385-396.

Wenkelpleck, J. M. Organizational and individual variables as predictors of interorganizational relations. Iowa State University: Unpublished dissertation, 1974.

Zaltman, G., Duncan, R., & Holbek, J. Innovation and organizations. New York: John Wiley and Sons, Inc., 1973.

Zaltman, G., Florio, D., & Sikorski, L. Dynamic educational change. New York: The Free Press, 1977.